

Date: Monday, 3/6/2006 1:48:19 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : WEARPLATE
 Job Number : 26058
 Estimate Number : 10298
 P.O. Number : N/A Part Number : D25773
 This Issue : 3/6/2006 S.O. No. : N/A Drawing Number : D2577 REV E
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : PURCHASED PARTS Drawing Revision : E
 Previous Run : 25171 Material : N/A
 Due Date : 3/31/2006 Qty: 50 Um: Each
 Written By : See Comment Below
 Checked & Approved By : 06.03.06
 Comment : Est: F 02.06.24 Re-format; Incorporated D2577-101/-13 KJ/
 RF

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG PURCHASING



Comment: PURCHASING

Issue P/O: 739

Email or Ship DXF file to vendor

Laser Cut per Dwg D2577 flat pattern D2577-101

Material release note required

C206/03/07

50

2.0 D25773F Wearplate Aft



Comment: Qty.: 1.0000 U(s)/Unit Total: 50.0000 U(s)

WEAR PLATE FWD

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material release note is attached

06/04/03 50

4.0 QC6 DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Inspect dimensions per template D2577-101T

06-04-05 (50)

5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr

N/A
R

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/05/08

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 3/6/2006 1:48:19 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 26058

Part Number: D25773

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1-Form on brake as per Dwg D2577 using DT8155 and DT8179

2-Identify as D2577-3

FF 06.04.20 50

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06.04.20 50

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using DT8308A & DT8308B as per Dwg D2577

Qty Description M100237 Batch

A/R 7560 Hardcoat Rod

M100452

M.F. 06.05.03 50

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

06/05/03 50

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

DL 06/05/04 50

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FC 06 05 08 50

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: IP

FC 06 05 08 50

13.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

SP 06/05/08 50

U 06.05.08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
060503	8	17 If wearplates need to have the hand cast touched-up, not enough penetration into the wear plate, causing some of the hand cast to break off.		re-weld the hand cast as per QSI 004 & Dwg. 2572 Rev. E.	M.F. 06.05. 03	AA 06/05/03		

NOTE: Date & initial all entries

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

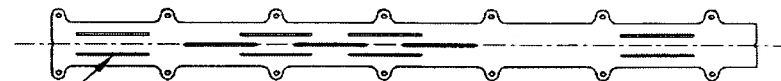
NOTE: Date & initial all entries



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00.09.22

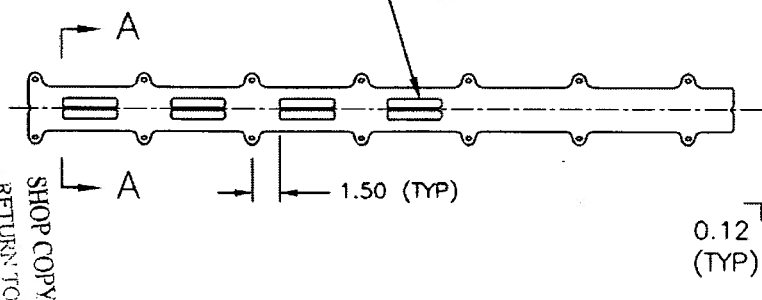
DESIGN	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	REV. E
CHECKED	APPROVED	DRAWING NO. D2577	SHEET 1 OF 5
DATE 00.09.22	TITLE WEARSHOE	SCALE 1:10	
A	96.09.16	NEW ISSUE	
B	96.12.04	ADD HARDCOAT WELDS	
C	97.05.30	CHANGE HOLES TO OBROUNDS	
D	98.08.17	CORRECTED DIMENSIONS ON -1 & -3	
E	00.09.22	ADD D2577-101/-11/-13 INCORPORATE DE09176	

7560 HARDCOAT WELD
4.0 LONG
0.063 TO 0.125 HIGH
(TYP. 11 PLS.)
WELD AFTER BENDING AS
ILLUSTRATED PER DT8308

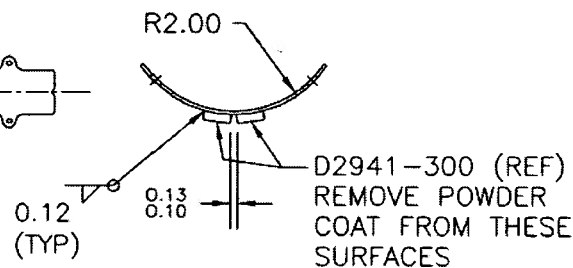


D2577-1 & D2577-3 WEARSHOE
MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

D2941-300
SHWAYDER WEAPADS
(8 PLACES)



SECTION A-A
SCALE 1:5



D2577-21 & D2577-23 WEARSHOE
MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY
FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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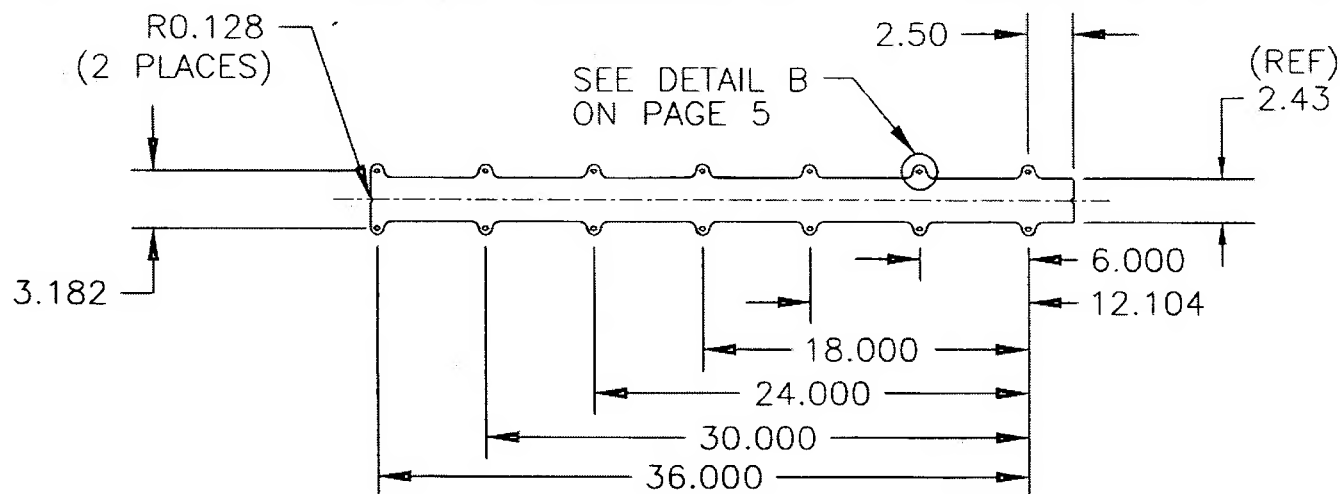
WITHOUT NOTICE

WORK ORDER

NO. 26058



DESIGN	DRAWN BY	DRAWING NO.	REV. E
	CP	D2577	SHEET 2 OF 5
CHECKED	APPROVED	TITLE	SCALE
00.09.22		WEARSHOE	1:10

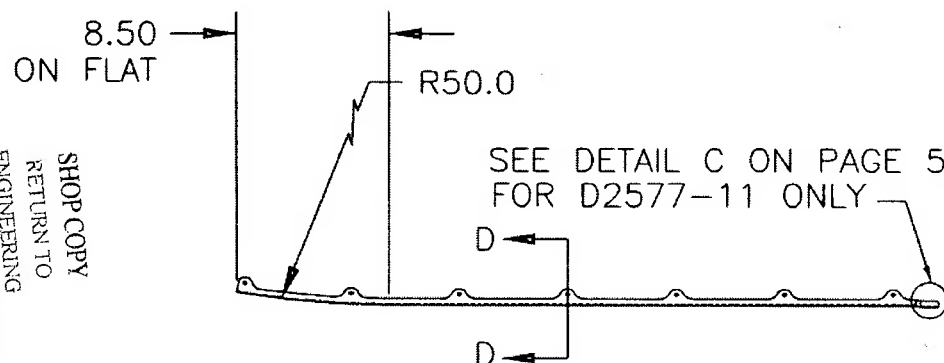


D2577-101 FLAT PATTERN

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570
SERIES STEEL 0.063 THICK

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2577-11 & D2577-13 LONGITUDINAL BEND

MAKE FROM D2577-101

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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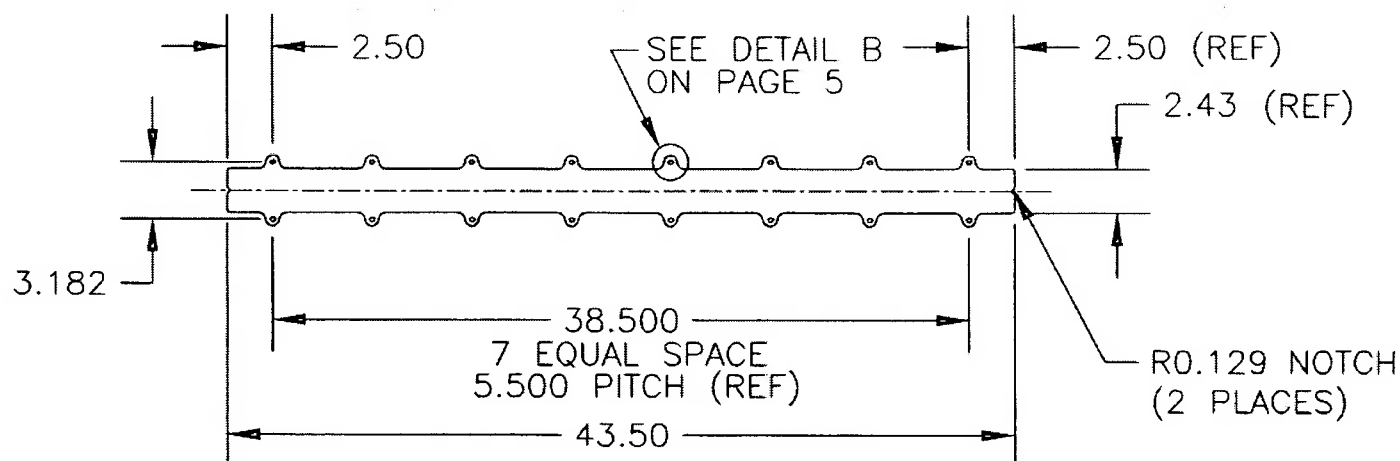
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NO. 26058



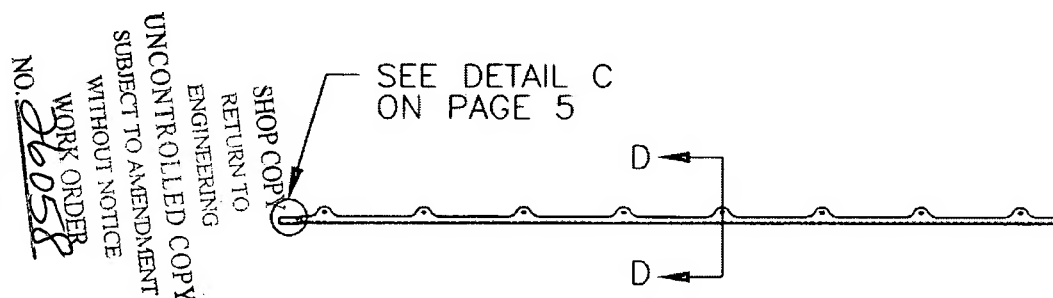
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CHECKED	<i>CP</i>	APPROVED	<i>CP</i>	
DATE	00.09.22	DRAWING NO.	D2577	REV. E
		TITLE	WEARSHOE	SHEET 3 OF 5
		SCALE	1:10	

RELEASED
00.09.22

D2577-5 FLAT PATTERN



D2577-5 LONGITUDINAL BEND



D2577-5 WEARSHOE

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570

SERIES STEEL 0.063 THICK

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3

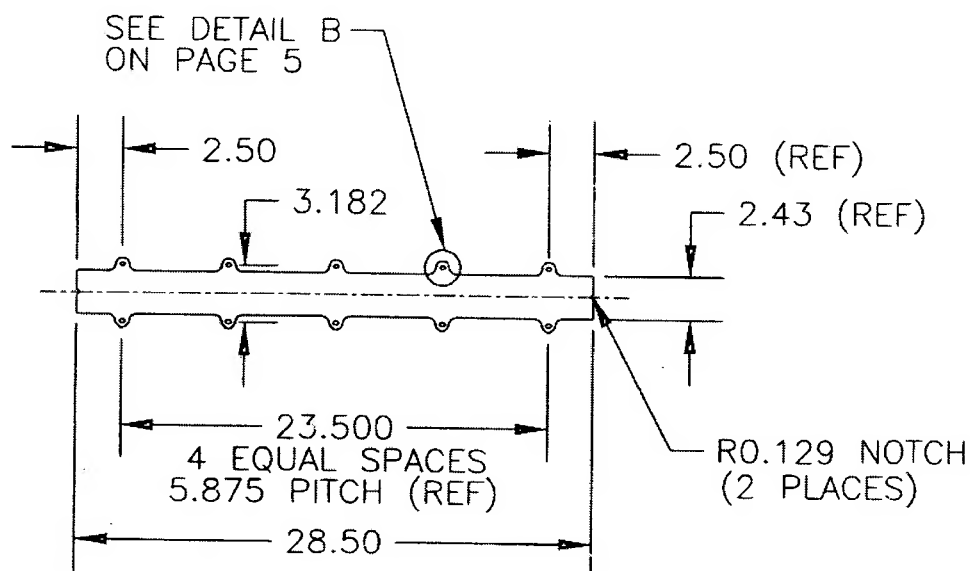
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



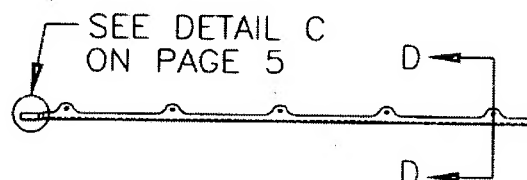
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DATE	DRAWING NO.	REV. E
00.09.22	D2577	SHEET 4 OF 5
	TITLE	SCALE
	WEARSHOE	1:10

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00.09.26

D2577-7 FLAT PATTERN



D2577-7 LONGITUDINAL BEND



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NO. 26058

D2577-7 WEARSHOE

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570

SERIES STEEL 0.063 THICK

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3

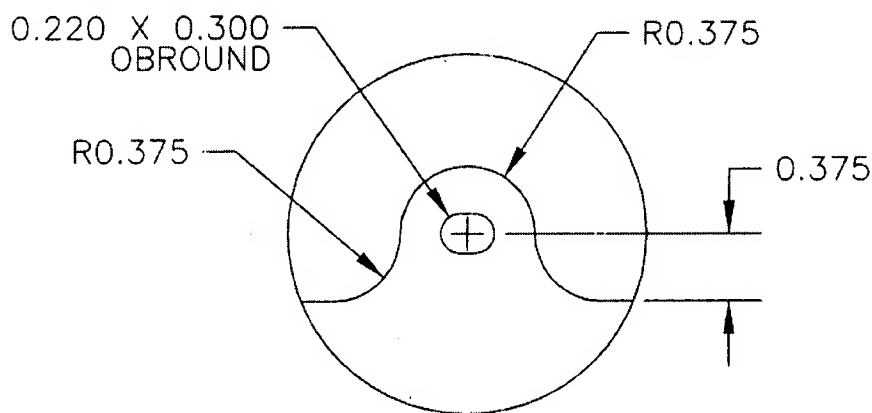
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



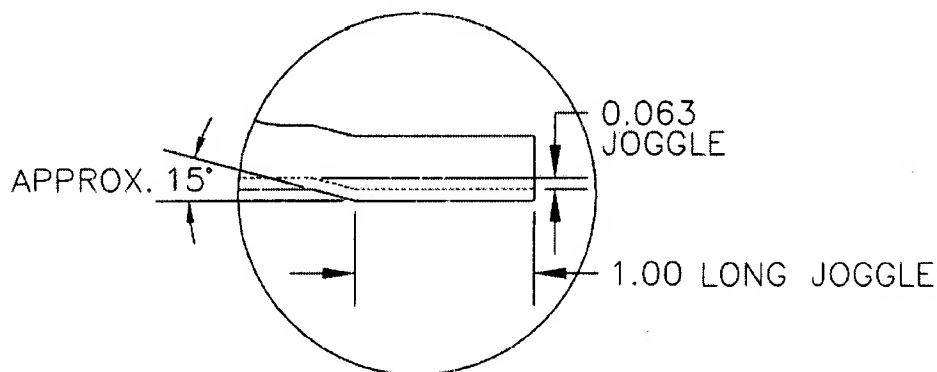
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CHECKED #	APPROVED #	DRAWING NO. D2577	REV. E SHEET 5 OF 5
DATE 00.09.22		TITLE WEARSHOE	SCALE 1:10

RELEASED
00.09.26

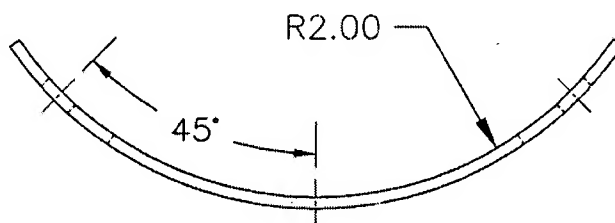
DETAIL B (SCALE 1:1)



DETAIL C (SCALE 1:1)



SECTION D-D (SCALE 1:1)



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New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephone: (09) 375 8898 / 375 8111 Auckland
(09) 236 9089 / 236 3535 Waiuku
Fax: (09) 375 8899

TEST CERTIFICATE

Ref: 5740/25104

Reissued 1/12/2005

CUSTOMER	Wilkinson	SPECIFICATION	ASTMA1088 CS Type A	CERTIFICATE No	TC122432
CUSTOMER ON	90-21N-963	PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL ON	507666	DIMENSIONS	0.955" x 48" x Coil	DATE	29 November 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT															MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)							
		C	SI	Mn	P	S	Cu	NI	Cr	Mo	V	Nb	TI	Al	B	N2	CE()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH
		x100			x1000												x10000	x100	180°			G.L.=	HRB	()
R9-470783-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1532
R9-470784-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1444
R9-470785-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1558
R9-470786-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1499
R9-470787-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1558
R9-470788-00	645530	6	1	20	11	21	12	17	22	2	5	1	1					Good				53		1545
R9-470789-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				56		1558
R9-470790-00	645502	6	1	20	14	21	11	17	21	1	6	1	1					Good				56		1558
R9-470791-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				50		1558
R9-470792-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				50		1444
R9-470793-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				53		1558
R9-470794-00	645701	5	TR	19	11	15	12	17	23	3	8	1	1					Good				53		1444
R9-471202-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1631
R9-471203-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				57		1604
R9-471204-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				58		1604
R9-471205-00	645502	6	1	20	14	21	11	17	21	2	6	1	1					Good				58		1539

YIELD (A)=0.2% PROOF STRESS (B)=LOWER YIELD STRESS	GAUGE LENGTH (G.L.) (A)=200mm (C)=80mm (E)=2" (B)=50mm (D)=5.65 S ₀ (F)=8"	PLASTIC STRAIN RATIO (r) (A)=0 (C)=45 (B)=90 (D)=(r ₀ +r ₉₀ +2r ₄₅)/4	IMPACT TEST (A)=10mm x 10mm (B)=7.5mm x 10mm (C)=5mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	CARBON EQUIVALENT VALUE (CE) (A)=C+Mn/6 (B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15 (C)=C+Mn/6+Si/24 (D)=
--	---	---	---	---

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED

Satish Misra
QC METALLURGIST

560117MD030-2 T M INDUSTRIAL (P50916DI001) (02)

